DOCUMENT RESUME

ED 478 596 HE 036 019

AUTHOR	Pfleging, Elizabeth
TITLE	An Evaluation of the Early Alert Program at Columbia College.
PUB DATE	2002-05-00
NOTE	34p.; Master of Arts Action Research Project, California State University, Stanislaus.
PUB TYPE	Dissertations/Theses (040) -- Reports - Evaluative (142)
EDRS PRICE	EDRS Price MF01/PC02 Plus Postage.
DESCRIPTORS	*Academic Failure; *College Students; *High Risk Students; Higher Education; Program Effectiveness; Program Evaluation; Risk Management
IDENTIFIERS	*Academic Alert System; *Student Support Services; Warning

ABSTRACT

At Columbia College, a 2-year college in California, an Early Alert program was implemented in the middle 1980s to alert students at risk of academic failure to potential problems. With the exception of a few years in the 1990s, the program has been conducted each semester. In the fourth week of the semester, instructors are asked to identify students experiencing academic difficulties, and these students are then sent a form letter of notification and recommendations for action. The effectiveness of the Early Alert program was evaluated using a sample of 38 classes taught by 25 instructors in 16 different subject areas. Of the 370 students responding, only 14 indicated that they had received an Early Alert letter. Findings show that the Early Alert program is effective in identifying at-risk students in that the students who were warned were indeed at-risk, but the alerted students did not use academic support services at a rate that differed significantly from that of other students. The program is an effective first step, but appears to fall short of its intended goal of motivating students to seek support services. An appendix contains the survey. (Contains 9 tables and 17 references.) (SLD)

Reproductions supplied by EDRS are the best that can be made
from the original document.

ED 478 596

AN EVALUATION OF THE EARLY ALERT PROGRAM AT COLUMBIA COLLEGE

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

E. Pfleging

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

1

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

In Partial Fulfillment of the Requirements of the

Degree of Master of Arts in Education

California State University, Stanislaus

by

Elizabeth Pfleging

May 2002

BEST COPY AVAILABLE

IR056019

INTRODUCTION

Attrition, defined as students who enroll in college classes but do not successfully complete them (Tinto, 1993), is a complex yet significant problem in higher education. Tinto estimates that 54% of all first-time students enrolling in public two-year colleges nationwide end up dropping-out of school. For society at large, high drop-out rates yield less skilled, less educated workers in a global environment which demands an increasingly more skilled labor force to remain competitive (Jones & Watson, 1990). Each year's crop of high school drop-outs who never pursue further education is estimated to cost the U.S. government $240 billion over their collective lifetimes due to lost tax revenue and spending for social programs (Roueche & Roueche, 1994). For institutions of higher education, high rates of attrition can result in near-empty classrooms and under-utilized facilities. This can lead to difficulties in accurate long-term planning and funding, and ultimately, to a higher average cost per student (Jones & Watson). Because financial difficulty is, in itself, one of the risk factors contributing to increased drop-out rates (Brawer, 1996), the cost of attrition becomes a self-perpetuating cycle.

Many studies have been conducted to determine the various causes of student attrition. In Tinto's view (1993), the strength of student intention and commitment are central factors to consider in predicting student persistence vs. attrition. Intention is defined by Tinto as the educational goal the student enters college intending to complete. Commitment is the investment of time, effort and resources that the student is willing and able to commit in order to achieve their intended goal. However, community college students often come from backgrounds which

foster low or no higher education intentions, and which place many demands on the amount of time and energy the student can commit to their education (Roueche & Roueche, 1994). Thus, many community college students become "at-risk" or "high-risk" students; in other words, they fall into a category of students with a less than average chance of successfully meeting their educational goals (Grosset, 1997).

Although Tinto (1993) cautions that each student's reasons for leaving college are unique, there are common factors, which place some students in an at-risk or high-risk category. Brawer (1996) found that high-risk factors for attrition in community college students included working full-time, attending college part-time, having a low high school GPA, having family obligations or financial concerns, and being female and/or a member of an ethnic group other than white or Asian. Other risk factors cited by Martin (1999) included being a disabled student, a first generation college student, an athlete, or an international student. In reviewing retention at the community college level in Florida, Bushnell (1991) found that high-risk students were often those who registered late, had poor past academic histories, came from backgrounds in which education was not valued, and had numerous non-academic obligations. In addition to the above risk factors, Mohammadi (1994) also included limited interaction with students and faculty outside of class, and little involvement in campus activities. Likewise, in a study at the Bronx Community College, Baron (1997) found that social isolation and lack of integration into the campus environment were risk factors for student drop-out. In a study conducted by Napoli and Wortman (1998), community college students who reported high stress with limited social support systems had an average GPA of 1.5, while students who reported high stress with a

strong social support system earned an average GPA of 2.63. The results of these studies suggest that both poor academic preparation and limited social support for academic pursuits are strong predictors of attrition.

Many early intervention programs have been developed to provide increased academic preparation and support for educational success among high-school and even junior high-school aged at-risk youth. The philosophy behind such programs is that the earlier the intervention occurs, the more likely it is that the outcome will be successful (Fenske, Geranios, Keller, & Moore, 1997). At the college level, Tinto (1993) writes that early academic warning systems should alert students to potential problems within the first five to six weeks of the semester. California State Assembly Bill 3 (AB 3) and Title 5 matriculation regulations also recognize the importance of early intervention for students experiencing academic difficulties. AB 3 and Title 5 mandate the establishment of "a follow-up system that ensures regular monitoring for early detection of academic difficulty" (as cited in Lewallen, 1993, p. 3).

At Columbia College in California, an Early Alert Program was implemented in mid-1980s and, with the exception of a few years in the mid-90s (Sunday, 1994), has been conducted each semester as follows: during the fourth week of the semester, instructors are asked (via a scantron roster form) to identify students who are experiencing one or more of the following academic difficulties: not attending, not participating, failing tests, lacking basic skills, or not completing assignments. This information is then collected and processed to generate a form letter, which is mailed to each identified student. The letter informs the student of their

instructor's concern and recommends that the student contact his/her instructor, visit a counselor or the academic achievement center, etc.

The Early Alert Program at Columbia College is designed to demonstrate institutional concern and support for a student experiencing academic difficulty while also providing much-needed direction regarding appropriate resources available. The hope is that by providing assistance and support early in the semester to students at-risk of failing, those students will go on to successfully complete the semester and thus keep working toward their education goals. However, whether program design is congruent with program outcome is unclear as there has never been an evaluation of the Early Alert Program at Columbia College.

Purpose of the Study

Because a large percentage of Columbia College students fall into categories at high-risk for drop-out as discussed above (employed full-time, enrolled part-time, heads of household, etc.), it is essential that an effective Early Alert Program be in place to help identify and assist these students. The primary objectives of this study, then, are a) to determine the extent to which identified students follow-through on Early Alert recommendations and b) to investigate the effectiveness of the Early Alert Program in the early identification of students at-risk of failure. From these objectives, the following hypotheses can be formulated:

Null Hypothesis 1 - There will be no significant difference in the self-reported use of services by Early Alert vs. non-Early Alert students surveyed during fall semester 2001.

Null Hypothesis 2 - There will be no significant difference in GPA or course completion for Early Alert vs. non-Early Alert students enrolled in the classes surveyed during fall semester 2001.

A secondary objective of this study is to review and summarize Early Alert data from recent semesters in order to determine whether participation and results are consistent from semester to semester. The Early Alert data from Fall 1999, Spring 2000, Fall 2000 and Spring 2001 semesters will be reviewed with the following questions in mind:

Question 1 - How many Early Alerts are there each semester?

Question 2 - How many faculty participate in the Early Alert Program?

Question 3 - Which reasons for alerts are most frequently noted?

Question 4 - What is the academic outcome for Early Alert students?

Limitations of the Study

This study focuses on the effectiveness of the Early Alert program in the early detection of academic difficulties, and in assisting students to connect with campus resources that may be helpful to them. It does not take into consideration the many academic, personal and environmental factors that may also influence student success or failure.

Operational Definitions

Early Alert (EA) refers to the Early Alert Program as it is currently implemented at Columbia College. EA students are those students who have received at least one Early Alert

notice for at least one class. Non-EA students are those students who have received no Early Alert notices for any classes. Successful course completion refers to those students who receive grades of A, B, C, or CR (credit) vs. unsuccessful students who receive grades of D, F, NC (no credit), I (incomplete) or W (withdrawal).

REVIEW OF EARLY ALERT EVALUATIONS AT OTHER INSTITUTIONS

The purpose of this study was to investigate the effectiveness of the Early Alert (EA) Program at Columbia College, both in the early identification of students at risk of failure and in determining the extent to which identified students use academic services and resources. Several other community colleges and universities have implemented similar EA programs, and have published evaluations of these programs (Cartnal & Hagen, 1999; Eimers, 2000; Lewallen, 1993; Rudmann, 1992).

At Irvine Valley College, a 2-year community college in California (Rudmann, 1992), instructors used a scantron form to refer students in their classes who were experiencing academic difficulties early in the semester. The referred students were then randomly assigned to one of three groups: those who received an EA letter only, those who received an EA letter asking them to meet with an advisor to discuss academic resources and successful study strategies, and those in a control group who received no contact. Academic outcomes were then tracked for the students in these three groups and compared to a randomly chosen group of students who had not received any alerts. Students in the group who received no alerts had a significantly higher course passrate (t=11.29, p<.001) and GPA (t=7.77, p<.001) than those students who received at least one alert, confirming the effectiveness of the EA program in identifying students at-risk of failing. There were also significant correlations between students

who received at least one EA and semester GPA (r=-.33, p<.001) as well as course passrate (r=-.37, p<.001).

Among the three treatment groups of EA students, the author reported no significant difference in outcomes, although both the letter and the advisor groups had higher academic outcomes than the control (no contact) group. Despite statistical non-significance, Rudmann (1992) expresses the opinion that continued use of the EA program at Irvine Valley College, as well as tracking student follow-through on EA referrals, is essential in order to increase retention of at-risk students and to generate information and recommendations for improvement of student services.

Cuesta College, also in California, initiated an evaluation of their Early Alert program in response to a recommendation from the state Chancellor's office following a Matriculation program evaluation (Cartnal & Hagen, 1999). At Cuesta, a survey was distributed to EA students to collect and analyze data regarding demographic characteristics of the EA student population as well as tracking which services EA students had used as a result of receiving an EA letter. Results for 1999 indicated that 43% of EA students met with their instructors as the result of receiving an EA letter. Percentages were also tabulated for EA students who indicated they had met with a counselor (30%), used the writing center (17%), the tutorial center (17%), the math lab (14%), or the learning skills lab (11%). Nineteen percent of EA students had taken no action as the result of receiving the letter. This survey provided important information on the effectiveness of the EA program in connecting at-risk students with services that might help

them. However, academic outcomes of survey respondents were not tracked; thus the survey provided little information on the effectiveness of the EA program in assisting students to successfully complete their classes.

Eimers (2000), however, did track final course grades of respondents in a web-based survey of 816 EA students at a 4-year mid-western research university. Results indicated a significant difference in academic outcomes between the treatment group (students at risk of failing who received an EA letter), and the control group (students at risk of failing who received no contact). However, the significance was in an unexpected direction; it was the control (no contact) group of EA students whose final grades were significantly higher than the treatment (letter) group of EA students ($\underline{X}^2 = 7.4$, $\underline{df} = 1$, $\underline{p}<.01$). When survey responses were ranked among the letter group of EA students from most (#1) to least (#22) frequent actions taken as a result of receiving an EA letter, results indicated that students were most likely to take personal action such as studying more (#1), getting better organized (#2) or talking to parents or peers (#3, 4) rather than taking academic action such as contacting an instructor or advisor (#7), contacting the learning center (#13) or seeking tutoring (#14). The author notes that the actions most frequently taken by students were not necessarily those actions that result in improved academic outcomes.

Eimers (2000) also notes that the EA students had lower ACT scores and ranks coming from high school than the general student population at the university. In the author's opinion, this information on past academic history offers a possible explanation for the unexpectedly

inferior performance of EA students who received the letter relative to those in the control group who received no contact: "...reminding relatively poorer students that they are not only in academic trouble in this course but also that they should seek academic assistance may have damaged an academic ego that was already somewhat fragile" (Eimers, 2000, p. 12). The author goes on to suggest that the results of his study indicate that one formal notice from the university to the student regarding poor academic performance may not be adequate to see a significant, positive effect on academic outcome.

In summary, it appears that there is limited and conflicting data regarding the effectiveness of EA programs as they are currently implemented. Rudmann's (1992) study indicates that EA is an effective tool for use in the early identification of students at risk of academic failure, while Eimer's (2000) study indicates that identified EA students who received a letter actually fared worse than EA students who received no contact. Clearly, there is no overwhelming support in the literature for the superiority of the Early Alert program over the use of other methods of early identification of at-risk students, such as placement test scores or self-assessment. However, because an Early Alert program is already in place at Columbia College as mandated by state matriculation requirements, and because this program has never been evaluated, it seems advisable to conduct such an investigation. The results from this study can then be used to determine the program's current effectiveness and to consider improvements that could be implemented in the future.

METHODOLOGY

College Demographics

Columbia College is a rural 2-year community college located four miles north of Sonora, California. The college draws approximately 3000 students, largely from surrounding and near-by Tuolumne and Calaveras counties. The educational focus of the college is to provide a comprehensive general education program leading to transfer to a 4-year college or university, or to an associate degree or vocational certificate. The student body is comprised of 38% men and 62% women. Ten percent of students belong to ethnic minorities, with 30% of students between 18 and 24 years of age, 13% between 25 and 34 years of age, 27 % between 35-54 years of age, and 26% over 55 years of age (Columbia College, 2001).

Survey Procedures

Sample

Participants included both Early Alert and non-Early Alert students enrolled in the same classes in Fall semester 2001. Surveys were sent to instructors of all classes (excluding activity-based P.E. classes) in which the instructor had referred at least one student to the Early Alert program. The initial sample included 38 classes taught by 25 instructors in 16 different subject areas.

Treatment

The Early Alert program as currently implemented at Columbia College was the treatment. During the fifth week of class, instructors received a scantron form for each class they were teaching with each student's name on the form. Participating instructors then bubbled in the names of students who were experiencing academic difficulty in one or more specific problem area: not attending, incomplete assignments, failed test, not participating, lacking basic skills. A counselor assigned to oversee the Early Alert program collected the EA forms and sent them to the college's district office which then generated an Early Alert letter which was mailed to each identified student. The letter informed the student of the class(es) in which the instructor(s) felt they needed assistance, and gave various suggestions for follow-up action and available services which could help the student academically. College policy required that all identified students must receive an EA letter, thus the use of a control group (identified students who did not receive a letter) was not possible in this study.

Instrumentation

Both students who received Early Alerts and students who did not completed the same survey questionnaire. A copy of the survey questionnaire is attached (Appendix).

Administration of Instrument

Three weeks before the end of the semester, students were surveyed during classtime. The survey was designed to take less than five minutes to distribute, complete and collect.

Students did not put their names on the questionnaires; all information was collected anonymously.

Statistical Analysis

Use of services and ease of use ratings were analyzed using descriptive statistics (means, percentages). A chi square test was used to determine whether there was a significant relationship between a student's Early Alert status and his/her use of services. Chi square tests were also used to determine whether a significant relationship existed between a student's Early Alert status and

the number of units in which he/she was enrolled or the number of hours he/she worked per week.

GPA and course completion rates were calculated at the end of the semester using instructor grade sheets from the surveyed classes. Mean GPA was determined for all students in the EA group and all students in the non-EA group. A t-test of independent means was used to test for significant difference in GPA between the two groups. Course completion was coded (1 = successful, 2 = not successful) for all students in the EA group and all students in the non-EA group. A chi square test was used to determine whether a significant relationship existed between EA status and course completion.

Early Alert Data Review Procedures

Sample

Sample participants included all students who received at least one Early Alert during the Fall 1999, Spring 2000, Fall 2000 and Spring 2001 semesters.

Treatment

Early Alert data for each of the four semesters was reviewed for the following information:

- number of alerts reported
- number of faculty participating
- number of each type of alert reported (failed test, not attending, lack basic skills, not participating, incomplete assignments)
- final grade of student in the class for which the EA was received

Statistical Analysis

Descriptive statistics (means, percentages) were used to summarize the information listed above.

RESULTS AND DISCUSSION

The purpose of this study was to evaluate the effectiveness of Columbia College's Early Alert program, as well as to review Early Alert data from past semesters. Therefore, findings from the survey are presented first, followed by results of the review of Early Alert data.

Survey Results

Response Rate

Surveys were originally sent to all instructors who had submitted an Early Alert roster with at least one Early Alert noted (25 instructors, 38 classes). Nineteen of these instructors administered the survey in 31 classes representing 14 different subject areas and 370 students. The original Early Alert rosters submitted by these 19 instructors for these 31 classes included 92 Early Alert students and a total of 121 Early Alerts (some students received multiple alerts for different reasons and/or for different classes). However, of the 370 students who were surveyed, only 14 indicated that they had received an Early Alert letter from the college (15.4% response rate). Two hundred ninety-six students indicated that they had not received an Early Alert letter, and 55 indicated that they did not remember whether or not they had received a letter. Five students left this question on the survey blank.

Possible explanations for the low EA student response rate include the high number of alerts in the "not attending" category noted in Table 1 (many EA students may have been absent on the day the survey was administered). A second possible explanation: EA students were

uncomfortable admitting they were experiencing academic difficulties by answering "yes", so they answered "no" or "do not remember" instead.

Table 1

Reasons for Alerts in Surveyed Classes, Fall Semester 2001

Reason for Alert	Number Alerts	Percent of Total
Failed Test	42	34.7
Incomplete Assignments	14	11.6
Lacking Participation	12	9.9
Not Attending	51	42.2
Lacking Basic Skills	2	1.6
Total	121	100

Description of Survey Respondents

Tables 2 and 3 describe the Early Alert status, as well as the work and enrollment status, respectively, of the students surveyed. Chi square tests indicated no significant relationship between EA status and number of units enrolled ($X^2 = 5.8$, df 4, $p = .214$), and no significant relationship between EA status and number of hours worked per week ($X^2 = 11.82$, df 10, $p = .297$). Thus, in contrast to other reports in the literature (Brawer, 1996; Bushnell, 1991), part

time enrollment and significant employment for the students in this survey did not appear to be associated with increased risk of academic difficulty.

Table 2

Early Alert and Enrollment Status of Surveyed Students, Fall 2001

Early Alert Status	1-5 units	6-11 units	≥ 12 units	Total
Received EA letter	0	8	6	14
Did not receive EA letter	25	87	183	295
Do not remember	6	16	32	54
Total Number	31	111	221	363
Percent of Total	8.5	30.6	60.9	100

Table 3

Early Alert Status and Average No. Hours Worked per Week by Surveyed Students, Fall 2001

Early Alert Status	0 hours	1-20 hrs	21-40 hrs	> 40 hrs	Total
Received EA letter	2	5	5	2	14
Did not receive EA letter	65	107	103	19	294
Do not remember	9	23	11	8	51
Total Number	76	135	119	29	359
Percent of Total	21.2	37.6	33.1	8.1	100

Reported Use of Services by Survey Respondents

Surveyed students were asked to indicate which of the following services they had used during the semester: meeting with instructor(s), tutoring, math lab, supplemental instruction, meeting with a counselor, EOPS/DSPS, career/transfer center, and financial aid. The mean number of services used by non-EA students was slightly higher ($M = 2.5$, $SD = 1.85$) than that of EA students ($M = 2.07$, $SD = 1.49$), although the difference was not statistically significant ($t = .904$, df 308, $p = .366$).

Thus, although the Early Alert letter sent to identified EA students encouraged them to seek services that might help them academically, it did not in fact appear to increase their use of services relative to their non-EA counterparts. These findings do not support the rejection of null hypothesis 1; in this study, there was no significant difference in self-reported use of services between Early Alert and non-Early Alert students.

Self-Reported Academic Performance of Survey Respondents

Students were also asked to rate their academic performance in the class during which they were being surveyed. Their choices were: (1) doing very well, (2) passing, (3) not passing, and (4) unsure. Table 4 indicates students' responses.

Table 4

Performance Self-Ratings by Students Surveyed Fall Semester 2001

Performance Self-Rating	No. of Students	Percent
Doing very well	128	34.6
Passing	187	50.5
Not Passing	11	3.0
Unsure	42	11.4
Total	370	100

The mean performance self-rating for EA students was passing ($M = 2.0$, $SD = 0.68$) and the mean performance self-rating for non-EA students was slightly higher ($M = 1.87$, $SD = 0.87$). Statistically, there was no significant difference between the mean performance ratings of these two groups ($t = .543$, df 307, $p = .588$). Thus, in their own opinions, the majority of both EA and non-EA students in the surveyed classes felt they were doing passing work.

Actual Academic Performance of Students in Surveyed Classes

Grades were reviewed at the end of the semester for all students enrolled in the surveyed classes. This sample was comprised of 726 students; 92 were students who had received at least one Early Alert, and 634 were non-EA students. Table 5 summarizes the students' actual academic performance.

Table 5

Actual Academic Performance of EA and non-EA Students in the Surveyed Classes Fall 2001

Actual Academic Performance	EA Students	Non-EA Students
% students with grades of A, B or C	13.1	68.5
% students with grades of D, F or I	19.5	11.8
% students with grade of W	67.4	19.7
Total	100	100

Two findings stand out after reviewing grade sheets. First, students are inaccurate when reporting their own academic performance. More than 78% of the EA students who were surveyed reported that they were either doing very well or passing, yet when grade sheets were reviewed, only 13.1% of the EA students received passing grades.

It is important to note that the data do not represent a direct comparison of the self-reported vs. actual performance of the same population. The self-reported data come from those students who completed the survey questionnaire; the actual performance data was collected via instructor grade sheets for all students in the class, regardless of whether or not they completed the survey. However, this contrast between self-reported vs. actual academic performance supports Lewallen's (1993) findings from a similar Early Alert survey and program evaluation at Antelope Valley College in California. Likewise, the same contrast existed among non-EA

students as well: Of the non-EA students surveyed, 87.8% responded that they were doing very well or passing, yet only 68.5% of non-EA students received passing grades. These findings reinforce the notion that instructor-generated performance reports are likely to be far more accurate as an early indicator of academic difficulty than are student-generated performance reports.

The second notable finding in reviewing grade sheets is the high percentage of Early Alert students who withdraw relative to non-EA students. Over two-thirds of EA students (67.4%) in the surveyed classes had W grades on their records at the end of the semester for the class(es) in which they had received the alert(s). This compares with only one-fifth (19.7%) of the non-EA students. Thus, the results of this study indicate that the most likely action a student will take after receiving an EA letter is to withdraw from the class for which the letter was received.

Grade point averages were calculated (using the traditional four-point scale) for EA and non-EA students enrolled in the surveyed classes. Letter grades of A, B, C, D and F were included in this calculation; CRs, NCs, Ws and Is were not included. The mean GPA for EA students was 1.33 (D average) and the mean GPA for non-EA students was 2.8 (C+ average). A t-test indicated that the difference between the mean GPAs of these two groups was statistically significant ($t = 6.307$, df 534, $p < .001$). Completion rates for both EA and non-EA groups were also calculated. Credit, no credit, withdrawal and incomplete grades were included in this calculation. For EA students, 13.1% of students were "completers" (grades of A, B, C, CR) and

86.9% were "non-completers" (grades of D, F, NC, W, I) vs. 68.5% of non-EA students as "completers" and 31.5% as "non-completers". A chi-square test indicated a significant relationship between Early Alert status and successful course completion ($\underline{X}^2 = 104.11$, $\underline{df}$ 1, $p < .001$).

These results support the rejection of null hypothesis 2. In this study, there was a significant difference in GPA and course completion rates between Early Alert and non-Early Alert students. Students identified early in the semester by their instructors via the Early Alert program had significantly lower GPAs and significantly higher attrition at the end of the semester than did students who were not identified.

Early Alert Data Review Results

Number of Participating Instructors

Table 6 summarizes the number of instructors participating in the EA program over four recent semesters. While there is some semester-to-semester variability, data from Table 6 emphasize that only a small number of faculty are involved with the Early Alert Program during any given semester. There are approximately 56 full-time faculty and 100 adjunct faculty teaching at the college, yet the highest participation (Spring 2000) was only 39 instructors, or 26% of the total full-time and adjunct faculty pool. Although there was a core group of about a dozen faculty who consistently participated each semester, the remaining faculty varied from semester to semester.

Table 6

Number of Instructors Participating in the EA Program Over Four Semesters

Semester	Number Participating Instructors
Fall 1999	27
Spring 2000	39
Fall 2000	33
Spring 2001	22

Students can only be referred to the EA program (and thus alerted to potential problems and available resources via the EA letter) if their instructor refers them. Thus, this high level of instructor non-participation suggests that many potential EA students are never referred.

Number and Types of Early Alerts Reported Each Semester

Table 7 indicates the number (expressed as a percent of the total) of each type of alert noted for each semester. Failing tests and not attending class were the most frequently noted reasons for alerts. This is consistent with results from the Fall 2001 study, as summarized in Table 1. The other reasons for alerts were reported fairly consistently over the four semesters, despite the potential for overlap between reasons. For example, "failed test" might be attributed to poor attendance, lack of basic skills, or some combination of the two.

Table 7

Types of Early Alerts Noted by Participating Instructors Over Four Semesters

Semester	Failed Test (%)	Incomplete Assignments (%)	Lacking Participation (%)	Lacking Skills (%)	Not Attending (%)
Fall 1999	34.75	13.83	15.25	5.67	30.5
Spring 2000	32.7	19.8	9.0	3.1	35.4
Fall 2000	29.4	27.8	12.3	4.3	26.2
Spring 2001	22.7	16.4	8.6	7.8	44.5

Academic Outcomes for Early Alert Students Over Four Semesters

Grades and course completion vs. non-completion were determined for EA students in each of the four semesters reviewed. Students may have failed or passed other courses during these semesters; only data pertaining to those courses for which an alert was received are presented here. Grades are summarized in Table 8 and course completion vs. non-completion is summarized in Table 9.

Table 8

Grades for Early Alert Students Over Four Semesters

Semester	% A's	% B's	%C/CR	% D's	%F/NC	% W's
Fall 1999	1.2	5.35	15.5	5.35	20.2	52.4
Spring 2000	13.8	11.4	19.1	4.4	18.4	32.9
Fall 2000	5.5	13.3	9.7	7.9	12.1	51.5
Spring 2001	5.8	10.3	6.9	4.6	14.9	57.5

Table 9

Completers (EA students with A, B, C, CR grades) vs. Non-Completers (EA students with D, F, NC, W, I grades) Over Four Semesters

Semester	% Completers	% Non-Completers
Fall 1999	22	78
Spring 2000	44	56
Fall 2000	28	72
Spring 2001	23	77

The results of this data review show consistency from semester to semester in the academic outcome of EA students. With the exception of the Spring 2000 semester,

approximately one-half of the students who received an EA in a class end up with a final grade of W in that class. When these Ws are combined with earned Ds and Fs, the number of EA students who do not successfully complete the course rises to over 70%.

Although these numbers indicate a margin of success that is somewhat greater than that of the Fall 2001 study (13% successful completion vs. 87% non-completion), they follow the general trend: A student who receives an Early Alert in a class is not likely to successfully complete that class. Thus, the review of data supports the findings of the Fall 2001 study; students identified and referred by their instructors to the Early Alert program are indeed at high risk of academic failure.

The data from Spring 2000 semester are an exception to the above-described trend. During Spring 2000 semester, almost half (44%) of the students who received an EA letter successfully completed the course for which the alert was received. A surprising 13% received a grade of A in the class for which the alert was received. It is unclear why the academic outcome for EA students for Spring 2000 semester was more positive than for the other semesters reviewed. The available information provides no clues. An anomaly such as this hints at the benefit that a routine review of EA results could provide. Such a review, if done as a regular end-of-semester practice, might catch errors or highlight any aspect of the EA program which was implemented differently during that particular semester, and which might possibly be linked to an improvement (or to a drop) in academic outcome for EA students.

SUMMARY

Like many community colleges, Columbia College has a high population of non-traditional students who fall into categories generally considered at higher-than-average risk for academic failure. Such categories include students who work full-time and attend school part-time, students with considerable responsibilities outside of school, and students with poor academic history, support, and preparation. Attrition rates for at-risk students are generally high, and attrition is expensive both for the college (in empty classrooms and lost enrollment fees) and to society at large (in a less skilled, less competitive and less competent workforce). Thus, many approaches have been developed and implemented in order to identify at-risk students and to provide them with the extra academic assistance they need in order to stay enrolled and successfully meet their educational goals. This study was conducted in an attempt to better understand and evaluate the effectiveness of one such approach, the Early Alert Program, in identifying and assisting at-risk students at Columbia College.

Results from this study indicate that the Early Alert program is effective in identifying at-risk students; EA students were at a higher risk of both academic failure and attrition than non-EA students. Given the above conclusion that EA students are indeed at higher risk of academic failure than non-EA students, the assumption can be made that, while all students benefit from the use of academic support services, EA students need to use such services even more than do non-EA students. However, results from this study indicate that the EA students did not use academic support services at a significantly different rate than non-EA students. The implications of the above two conclusions are clear: although the EA program is an effective first

step in identifying students in need of help, it appears to fall short of its intended goal of motivating those students to seek the services which will improve their opportunities of academic success.

REFERENCES

Baron, W. (1997). The problem of student retention: The Bronx Community College solution: The freshman year initiative program. New York: Bronx Community College. (ERIC Document Reproduction Service No. ED 409 971)

Brawer, F. B. (1996). Retention-attrition in the nineties. Los Angeles: ERIC Clearinghouse for Community Colleges. (ERIC Document Reproduction Service No. ED 393 510)

Bushnell, J. R. (1991). Retention at the community college level. (ERIC Document Reproduction Service No. ED 331 571)

Cartnal, R., & Hagen, P. F. (1999). Evaluation of the Early Alert program, Spring 1999. San Luis Obispo, CA: Cuesta College. (ERIC Document Reproduction Service No. ED 441 541)

Columbia College. (2001). Pocket facts. Sonora, CA: Author.

Eimers, M. T. (2000). Assessing the impact of the Early Alert program. Paper presented at the meeting of the Association for Institutional Research, Overland Park, KS. (ERIC Document Reproduction Service No. ED 446 511)

Fenske, R. H., Geranios, C. A., Keller, J. E., & Moore, D. E. (1997). Early intervention programs: Opening the door to higher education. Washington, DC: George Washington University.

Grosset, J. (1997). Beating the odds: Reasons for at-risk student success at Community College of Philadelphia. Philadelphia: Community College of Philadelphia. (ERIC Document Reproduction Service No. ED 411 933)

Lewallen, W. C. (1993). Early Alert: A report on two pilot projects at Antelope Valley College. Lancaster, CA: Antelope Valley College. (ERIC Document Reproduction Service No. ED 369 452)

Martin, S. A. (1999). Early intervention program and college partnership. Washington, DC: ERIC Clearinghouse on Higher Education. (ERIC Document Reproduction Service No. ED 435 383)

Mohammadi, J. (1994). Exploring retention and attrition in a two-year public community college. Martinsville, VA: Patrick Henry Community College. (ERIC Document Reproduction Service No. ED 382 257)

Napoli, A. R., & Wortman, P. M. (1998). Psychosocial factors related to retention and early departure of two-year community college students. Research in Higher Education, 39, 419 - 455.

Roueche, J. E., & Roueche S. D. (1994). Between a rock and a hard place: The at-risk student in the open-door college. Washington, DC: Community College Press.

Rudmann, J. (1992). An evaluation of several Early Alert strategies for helping first semester freshmen at the community college and a description of the newly developed Early Alert Retention System (EARS) software. Irvine, CA: Irvine Valley College. (ERIC Document Reproduction Service No. ED 349 055)

Sunday, D. (1994). [Summary of Early Alert during the 1980's at Columbia College]. Unpublished raw data.

Tinto, V. (1993). Leaving college: Rethinking the causes and cures of student attrition (2nd ed.). Chicago: University of Chicago Press.

Watson, B.C., & Jones, D.J. (1990). "High risk" students and higher education: Future trends. Washington, DC: ERIC Clearinghouse on Higher Education. (ERIC Document Reproduction Service No. ED 325 033)

APPENDIX

Early Alert Program Survey

How many units are you enrolled in this semester?_____

How many hours do you work each week?_____

Did you receive an Early Alert Letter for this class?

Yes_____ No_____ Don't remember_____

How do you feel you are currently doing in this class? (circle one)

Very well Passing Not Passing Unsure

Which of the following services, if any, have you used this semester? (circle all that apply)

MET WITH INSTRUCTOR(S)	MET WITH COUNSELOR
TUTORING	EOPS/DSPS
MATH LAB	CAREER/TRANSFER CENTER
SUPPLEMENTAL INSTRUCTION	FINANCIAL AID

If you circled any of the above services, please indicate how easy or difficult they were to use:

	difficult	moderate	easy
Meeting with instructors			
Tutoring			
Math lab			
Supplemental instruction			
Counseling			
EOPS/DSPS			
Career/Transfer Center			
Financial Aid			

U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)

REPRODUCTION RELEASE

(Specific Document)

I. DOCUMENT IDENTIFICATION:

Title: An Evaluation of the Early Alert Program at Columbia College	
Author(s): Elizabeth Pfleging	
Corporate Source:	Publication Date: May 2002

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, *Resources in Education* (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign at the bottom of the page.

The sample sticker shown below will be affixed to all Level 1 documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

1

Level 1 ↑ ☑

Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g., electronic) and paper copy.

The sample sticker shown below will be affixed to all Level 2A documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

2A

Level 2A ↑ ☐

Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only

The sample sticker shown below will be affixed to all Level 2B documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

2B

Level 2B ↑ ☐

Check here for Level 2B release, permitting reproduction and dissemination in microfiche only

Documents will be processed as indicated provided reproduction quality permits.
If permission to reproduce is granted, but no box is checked, documents will be processed at Level 1.

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Sign here, please

Signature: Elizabeth Pfleging	Printed Name/Position/Title: Elizabeth Pfleging	
Organization/Address: P.O. Box 1363 Columbia, CA 95310	Telephone: 209-533-1456	FAX:
	E-Mail Address: pfleging@mlode.com	Date: 5-22-2003

(Over)

III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, *or*, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:
Address:
Price:

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant this reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:
Address:

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to:

The ERIC Clearinghouse on Higher Education
One Dupont Circle NW #630
Washington, DC 20036
fax (202)452-1844

EFF-088 (Rev. 2/2001)